

ABSTRACT

A method for enhancing recovery by epithelial cells from ischemia by targeting distinct lesions. The method comprises inhibiting internalization of intercellular junctions, E-cadherin, occludin or other membrane proteins; 5 promoting reuse of preexisting components by targeting for activation specific signaling events during short-term ischemia; inhibiting degradation of E-cadherin or other key proteins necessary for the maintenance of the polarized epithelial cell phenotype; and enhancing the protein folding and assembly capacity in the endoplasmic reticulum and/or cytosol with agents which 10 upregulate cytoprotective chaperones, wherein the enhancing helps to reconstruct degraded adherens and tight junctions by *de novo* synthesis and movement of membrane proteins, and alleviation of cellular stress by raising levels of molecular chaperones.